

Anexo XI: Consultas y pruebas realizadas sobre las consultas

Creación del Database Link para acceder a las tablas de la base de datos origen

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/*****/
/* DATABASE LINK TO THE OLTP DATABASE LUZ *****/
CREATE DATABASE LINK
  LUZ_OLTP1
CONNECT TO system
IDENTIFIED BY asus
USING 'localhost:1521/luz';

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Consulta 1

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/*****/
/* QUERY 1 *****/
CREATE OR REPLACE VIEW CONSULTA1 AS
SELECT * FROM W_METER_SUMMARY_M ORDER BY YEARNUMBER, MONTHNUMBER, METER_WID;

/**** TEST FOR THE QUERY 1 *****/
SELECT METER_WID, W_DATE_D.MONTHNUMBER, W_DATE_D.YEARNUMBER, SUM(CONSUMPTION),
SUM(ENERGYCOST) FROM W_CONSUMPTION_F
INNER JOIN W_DATE D ON W_CONSUMPTION_F.DATE_WID=W_DATE_D.DATE_WID
GROUP BY W_CONSUMPTION_F.METER_WID, W_DATE_D.MONTHNUMBER, W_DATE_D.YEARNUMBER
ORDER BY W_DATE_D.YEARNUMBER, W_DATE_D.MONTHNUMBER, W_CONSUMPTION_F.METER_WID;

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Consulta 2

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/*****/
/* QUERY 2 *****/
CREATE OR REPLACE VIEW CONSULTA2 AS
SELECT
  CITY_WID
  , YEARNUMBER
  , MONTHNUMBER
  , METER_WID
  , CONSUMPTION_M
  , (SELECT CONSUMPTION_M FROM W_CITY_SUMMARY_M WHERE CITY_WID=T.CITY_WID AND
YEARNUMBER=T.YEARNUMBER AND MONTHNUMBER=T.MONTHNUMBER)*80/100 AS TOTAL80
FROM W_CITY_METER_SUMMARY_M T
WHERE (T.CONSUMPTION_M>(SELECT CONSUMPTION_M FROM W_CITY_SUMMARY_M WHERE
CITY_WID=T.CITY_WID AND YEARNUMBER=T.YEARNUMBER AND MONTHNUMBER=T.MONTHNUMBER)*80/100)
ORDER BY YEARNUMBER, MONTHNUMBER, CITY_WID, METER_WID;

/* TEST FOR THE QUERY 23 *****/
SELECT
  TO_NUMBER(TO_CHAR(T.DATE_WID, 'MM')) AS MONTHNUMBER
  , TO_NUMBER(TO_CHAR(T.DATE_WID, 'YYYY')) AS YEARNUMBER
  , T1.CITY_WID
  , T.METER_WID
  , SUM(T.CONSUMPTION) AS C
  , ((SELECT SUM(CONSUMPTION) FROM W_CONSUMPTION_F P INNER JOIN W_ADDRESS_D P1 ON
P.ADDRESS_WID=P1.ADDRESS_WID
WHERE
  TO_NUMBER(TO_CHAR(P.DATE_WID, 'MM'))= TO_NUMBER(TO_CHAR(T.DATE_WID, 'MM'))
  AND
  TO_NUMBER(TO_CHAR(P.DATE_WID, 'YYYY'))=TO_NUMBER(TO_CHAR(T.DATE_WID, 'YYYY'))
  AND
  P1.CITY_WID=T1.CITY_WID)*80/100) AS TOTAL80

FROM W_CONSUMPTION_F T INNER JOIN W_ADDRESS_D T1 ON T.ADDRESS_WID=T1.ADDRESS_WID
GROUP BY

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    TO_NUMBER(TO_CHAR( DATE_WID, 'MM' )),TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY' )), METER_WID,
    CITY_WID;
ORDER BY T.YEARNUMBER, T.MONTHNUMBER, T1.CITY_WID, T1.METER_WID;

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Consulta 3

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/*****
/* QUERY 3 *****/
CREATE OR REPLACE VIEW CONSULTA3 AS
SELECT YEARNUMBER, MONTHNUMBER, COUNTRY_WID, CITY_WID, CONSUMPTION_M FROM
W_COUNTRY_CITY_SUMMARY_M
ORDER BY YEARNUMBER, MONTHNUMBER, COUNTRY_WID, CITY_WID;

/* TEST FOR THE QUERY 3*****/
CREATE OR REPLACE VIEW CONSULTA3 AS
SELECT YEARNUMBER, MONTHNUMBER, COUNTRY_WID, CITY_WID, CONSUMPTION_M FROM
W_COUNTRY_CITY_SUMMARY_M
WHERE MONTHNUMBER=3 AND COUNTRY_WID=286
ORDER BY YEARNUMBER, MONTHNUMBER, COUNTRY_WID, CITY_WID;

SELECT YEARNUMBER, MONTHNUMBER, COUNTRY_WID, W_CITY_SUMMARY_M.CITY_WID, CONSUMPTION_M
FROM W_CITY_SUMMARY_M
INNER JOIN W_ADDRESS_D ON W_CITY_SUMMARY_M.CITY_WID=W_ADDRESS_D.CITY_WID
WHERE MONTHNUMBER=3 AND COUNTRY_WID=286
ORDER BY YEARNUMBER, MONTHNUMBER, COUNTRY_WID, W_CITY_SUMMARY_M.CITY_WID;

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Consulta 4

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/*****
/* QUERY 4 *****/
CREATE OR REPLACE VIEW CONSULTA4 AS
SELECT COMPANY_WID, YEARNUMBER, MONTHNUMBER,CORRECTREADINGS,TOTALREADINGS,
TO_CHAR((CORRECTREADINGS/TOTALREADINGS)*100, '999.99') AS READINGS_OK
FROM W_COMPANY_SUMMARY_M
ORDER BY YEARNUMBER;

SELECT COMPANY_WID, YEARNUMBER, MONTHNUMBER,CORRECTREADINGS,TOTALREADINGS,
TO_CHAR((CORRECTREADINGS/TOTALREADINGS)*100, '999.99') AS READINGS_OK
FROM W_COMPANY_SUMMARY_M
WHERE COMPANY_WID=53 AND MONTHNUMBER=1
ORDER BY YEARNUMBER;

/* TEST FOR THE QUERY 4*****/
select
  company_wid
  , TO_NUMBER(TO_CHAR( DATE_WID, 'MM'  )) AS MONTHNUMBER
  , TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY' )) AS YEARNUMBER
  , count(consumption) as casos
  , sum(case when consumption >0 then 1 else 0 end) as correct
  , (sum(case when consumption >0 then 1 else 0 end)*100/count(consumption)) as por
FROM W_CONSUMPTION_F
where COMPANY_WID=53 AND TO_NUMBER(TO_CHAR( DATE_WID, 'MM' ))=1
group by company_wid, TO_NUMBER(TO_CHAR( DATE_WID, 'MM' )) ,TO_NUMBER(TO_CHAR( DATE_WID,
'YYYY' ));

SELECT company_wid,date_wid,consumption FROM W_CONSUMPTION_F WHERE COMPANY_WID=53 AND
TO_NUMBER(TO_CHAR( DATE_WID, 'MM' ))=1 and TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY' ))=2013 ;

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Consulta 5

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/*****
/* QUERY 5 *****/
CREATE OR REPLACE VIEW CONSULTA5 AS
SELECT METER_WID,TO_CHAR(METERINSTALLATIONDATE, 'DD/MM/YYYY') AS METERDATE,
trunc((to_number(to_char(sysdate,'yyyymmdd'))-
to_number(to_char(METERINSTALLATIONDATE,'yyyymmdd')))/10000) AS AGE
FROM W_METER_D

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ORDER BY METERINSTALLATIONDATE;
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/* TEST FOR QUERY 5 *****/
SELECT W_METER_D.METER_WID,TO_CHAR(INSTALLATIONDATE, 'DD/MM/YYYY') AS METERDATE,
trunc((to_number(to_char(sysdate,'yyyymmdd'))-
to_number(to_char(INSTALLATIONDATE,'yyyymmdd')))/10000) AS AGE
FROM METER@LUZ_OLTP1 INNER JOIN W_METER_D ON METER.SERIALNUMBER=W_METER_D.METERCODE
ORDER BY INSTALLATIONDATE;
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Consulta 6

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/* *****/
/* QUERY 6 *****/
CREATE OR REPLACE VIEW CONSULTA6 AS
SELECT YEARNUMBER, COUNTRY_WID, CONSUMPTION, ENERGYCOST,
TO_CHAR((CONSUMPTION/ENERGYCOST),'99.999999') AS AVERAGE_COST FROM W_COUNTRY_SUMMARY_Y
ORDER BY YEARNUMBER, COUNTRY_WID;
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/* TEST FOR QUERY 6 *****/
SELECT
  TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY')) AS YEARNUMBER
  , COUNTRY_WID, SUM(CONSUMPTION)
  , SUM(ENERGYCOST)
  , TO_CHAR((SUM(CONSUMPTION)/SUM(ENERGYCOST)),'99.999999') AS AVERAGE_COST
FROM W_CONSUMPTION_F INNER JOIN W_ADDRESS_D ON
W_CONSUMPTION_F.ADDRESS_WID=W_ADDRESS_D.ADDRESS_WID
GROUP BY TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY')), COUNTRY_WID
ORDER BY TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY')), COUNTRY_WID;
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```
SELECT
  YEARNUMBER
  , COUNTRY_WID
  , SUM(CONSUMPTION_m)
  , SUM(ENERGYCOST);
  TO_CHAR((SUM(CONSUMPTION_M)/SUM(ENERGYCOST)),'99.999999') AS AVERAGE_COST
FROM W_COUNTRY_SUMMARY_M
GROUP BY YEARNUMBER, COUNTRY_WID
ORDER BY YEARNUMBER, COUNTRY_WID;
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Consulta 7

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/* *****/
/* QUERY 7 *****/
CREATE OR REPLACE VIEW AS CONSULTA7
SELECT YEARNUMBER, MONTHNUMBER,METER_WID,ENERGYCOST
FROM W_METER_SUMMARY_M
ORDER BY YEARNUMBER, MONTHNUMBER, METER_WID;
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/* TEST FOR QUERY 7 *****/
SELECT
  TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY')) AS YEARNUMBER
  , TO_NUMBER(TO_CHAR( DATE_WID, 'MM')) AS MONTHNUMBER
  , METER_WID
  , SUM(ENERGYCOST)
FROM W_CONSUMPTION_F
GROUP BY TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY')), TO_NUMBER(TO_CHAR( DATE_WID, 'MM')) ,
METER_WID
ORDER BY TO_NUMBER(TO_CHAR( DATE_WID, 'YYYY')), TO_NUMBER(TO_CHAR( DATE_WID, 'MM')) ,
METER_WID;
```

Consulta 8

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/* *****/
/* QUERY 8 *****/
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CREATE OR REPLACE VIEW CONSULTA8 AS
SELECT * FROM (
  SELECT
    CITY_WID, METER_WID, CONSUMPTION_T
    , DENSE_RANK() OVER (PARTITION BY CITY_WID ORDER BY CONSUMPTION_T DESC) drnk
  FROM W_CITY_METER_SUM_T)
WHERE drnk<=10
ORDER BY CITY_WID, METER_WID, CONSUMPTION_T DESC;

/* TEST FOR QUERY 8 *****/
/* THE TEST ITSELF IS TOO COMPLEX *****/

SELECT
  CITY_WID, METER_WID, SUM(CONSUMPTION)
FROM W_CONSUMPTION_F INNER JOIN W_ADDRESS_D ON
W_CONSUMPTION_F.ADDRESS_WID=W_ADDRESS_D.ADDRESS_WID
GROUP BY CITY_WID, METER_WID
ORDER BY CITY_WID, SUM(CONSUMPTION) DESC, W_CONSUMPTION_F.METER_WID
  
```

Consulta 9

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/*****/
/* QUERY 9 *****/
CREATE OR REPLACE VIEW CONSULTA9 AS
SELECT CITY_WID, CONSUMPTION_m/CONSUMERNUMBER AS AVERAGE_CONSUM FROM W_CITY_SUMMARY_M
ORDER BY YEARNUMBER, MONTHNUMBER, CITY_WID;

/* TEST FOR QUERY 9 *****/
SELECT
  TO_NUMBER(TO_CHAR(DATE_WID, 'YYYY')) AS YEARN
  , TO_NUMBER(TO_CHAR(DATE_WID, 'MM')) AS MONTHN
  , A1.CITY_WID
  , SUM(T.CONSUMPTION)
  , (SELECT COUNT(DISTINCT CONSUMER_WID) FROM W_CITY_CONS_SUMMARY_M WHERE
MONTHNUMBER=TO_NUMBER(TO_CHAR(DATE_WID, 'MM')) AND CITY_WID=A1.CITY_WID) AS PERSON
  , SUM(T.CONSUMPTION)/(SELECT COUNT(DISTINCT CONSUMER_WID) FROM W_CITY_CONS_SUMMARY_M
WHERE MONTHNUMBER=TO_NUMBER(TO_CHAR(DATE_WID, 'MM')) AND CITY_WID=A1.CITY_WID) AS
AVERAGE_CONSUM
FROM W_CONSUMPTION_F t INNER JOIN W_ADDRESS_D A1 ON T.ADDRESS_WID=A1.ADDRESS_WID
GROUP BY A1.CITY_WID, TO_NUMBER(TO_CHAR(DATE_WID, 'YYYY')) , TO_NUMBER(TO_CHAR(DATE_WID,
'MM'))
ORDER BY TO_NUMBER(TO_CHAR(DATE_WID, 'YYYY')) , TO_NUMBER(TO_CHAR(DATE_WID, 'MM')) ,
CITY_WID ;
  
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